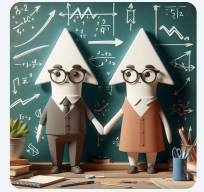


# Causation vs Correlation

Name:

Date:



## Causation vs. Correlation: What's the Difference?

Read the definitions and examples carefully to understand the difference between causation and correlation.

Definitions:

**Causation:** When one event causes another event to happen. There is a cause-and-effect relationship.

Example: Eating lots of sugary snacks causes cavities.

**Correlation:** When two events happen at the same time or in a similar pattern but one does not necessarily cause the other.

Example: Ice cream sales and drowning incidents both increase in the summer, but eating ice cream does not cause drowning.

## Decide if the sentence is an example of causation or correlation

**When there is more sunlight, plants tend to grow faster.**

☐ correlation ☐ causation

**As the temperature increases, the number of people swimming at the beach also increases.**

☐ causation ☐ correlation

**Deforestation leads to a decrease in the number of animal species in an area.**

☐ correlation ☐ causation

**Areas with higher levels of air pollution have higher rates of respiratory diseases.**

☐ correlation ☐ causation

**The more time spent outside, the more likely a person is to have a sunburn.**

☐ causation ☐ correlation

**Regions with higher rainfall have more lush vegetation.**

☐ correlation ☐ causation

**During full moon, there is an increase in the number of animal attacks reported.**

☐ causation ☐ correlation

**The presence of certain types of fungi in soil is associated with the growth of healthier plants.**

☐ causation    ☐ correlation

**Explain why the sentence 'As the temperature increases, the number of people swimming at the beach also increases' is an example of correlation.**

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**Describe why the sentence 'Deforestation leads to a decrease in the number of animal species in an area' is an example of causation.**

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**Explain why the sentence 'The presence of certain types of fungi in soil is associated with the growth of healthier plants' is an example of causation.**

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**Your turn to use causation and correlation**

**Write a short story that includes both a causal relationship and a correlation.**

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**Create a comic strip for your short story**

Panel 1...

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